ARCS I

Final Site Inspection Prioritization

Truk-Away Landfill

Warwick, Rhode Island

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
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INTRODUCTION

The CDM Federal Programs Corporation (CDM) Alternative Remedial Contracting Strategy (ARCS) team was requested by the U.S. Environmental Protection Agency (EPA) Region I Waste Management Division to perform a Site Inspection Prioritization (SIP) of the Truk-Away Landfill property in Warwick, Rhode Island. Tasks were conducted in accordance with the ARCS Contract No. 68-W9-0045, SIP scope of work dated September 3, 1992, and technical specifications provided by EPA under Work Assignment No. 23-1JZZ, which was issued to CDM on September 22, 1992. A Site Inspection was prepared by Ecology and Environment, Inc. in June 1982. On the basis of the information provided in the Site Inspection report, the Truk-Away Landfill SIP was initiated.

Background information used in the generation of this report was obtained through file searches conducted at Rhode Island Department of Environmental Management (RIDEM), Rhode Island Department of Administration, telephone interviews, conversations with persons knowledgeable of the Truk-Away Landfill, and conversations with other federal, state, and local agencies. Additional information was collected during the CDM onsite reconnaissance on March 10, 1993 and environmental sampling on May 11, 1993.

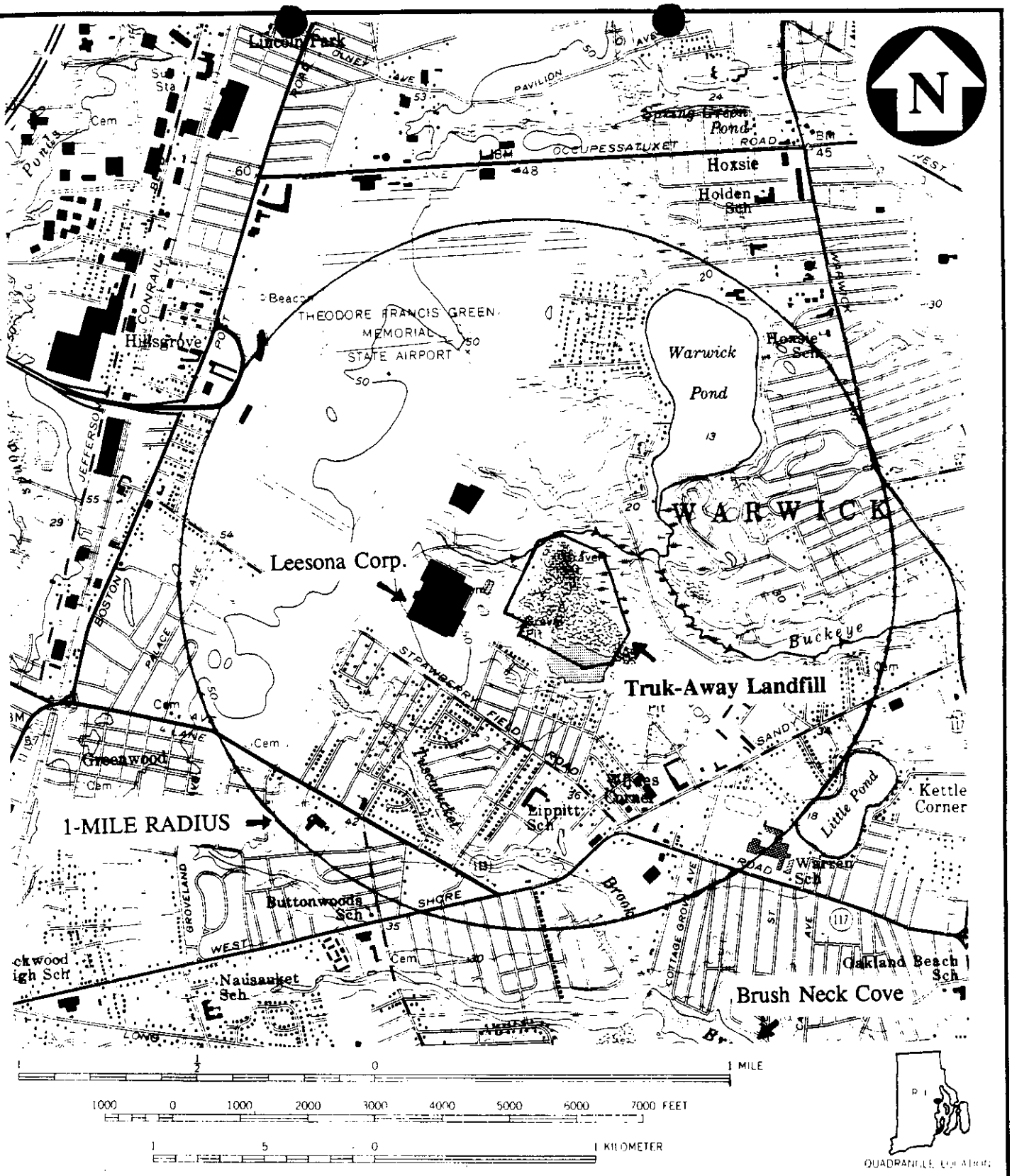
This package follows the guidelines developed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, commonly referred to as Superfund. However, these documents do not necessarily fulfill the requirements of other EPA regulations such as those under the Resource Conservation and Recovery Act (RCRA) or other federal, state or local regulations. SIPs are intended to provide a preliminary screening of sites to facilitate EPA's assignment of site priorities. They are limited efforts and are not intended to supersede more detailed investigations.

SITE DESCRIPTION

The Truk-Away Landfill is located on Industrial Drive in Warwick, Kent County, Rhode Island (Latitude 41° 34′ 50″ N, Longitude 71° 25′ 20″ W) (see Figure 1: Location Map) [59]. The actual landfill comprises approximately 36 acres of a 52-acre parcel and is located approximately 3 miles west of Narragansett Bay, 2 miles north of Greenwich Bay and is adjacent to the Theodore Francis Green Memorial State Airport southeast runway [2,15]. The property is identified as Plat 342, Lots 2,3,5, and 429 in the City of Warwick Land Evidence Records [3]. The landfill is zoned light industrial [7]. The land in the area adjacent to Sandy Lane is generally zoned for residential use; some areas near the site have been developed for light industry [11]. The property is bordered to the southeast by the old Warwick City Dump (no longer operating), to the south by a residential area, to the west by the former Leesona Corporation, to the north by the airport runway, and to the east by wetlands [2].

There are no buildings on the property, but concrete slabs near the main entrance indicate the location of former buildings onsite. A dirt road crosses the landfill. Varying depths of fill throughout the landfill are evidenced by rises and slopes and exposed trash and debris (medical waste, paint cans, crushed drums, electrical waste, mercury film packs) scattered across the property. A dark oily area is located near the concrete slabs [2].

An 8-foot fence topped with barbed wire surrounds the property and concrete Jersey barriers prevent access to the main entrance. Tires, used oil, and other solid waste have been illegally dumped along Industrial Drive just outside the main entrance. Access to the landfill is not limited near the residential area located south of the property due to an estimated 25-foot wide opening in the landfill's fence. Well-worn dirt bike trails extend into the landfill from the end of Bartlett Drive [2].



Source: U.S.G.S. 1957: East Greenwich, R.I. 7.5 ' series (topographic).

LOCATION MAP
TRUK-AWAY LANDFILL
WARWICK, RHODE ISLAND

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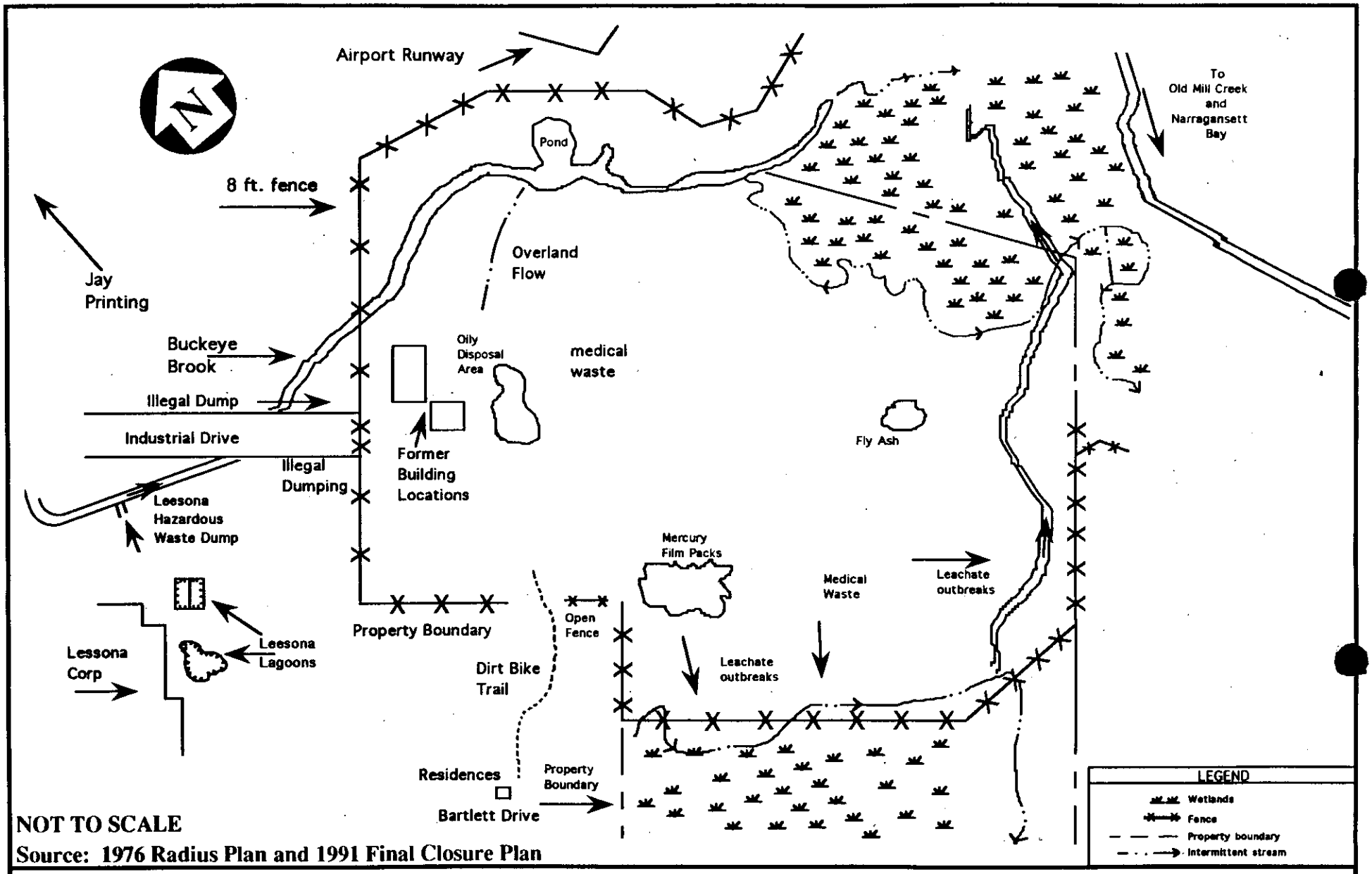
Figure 1



NOT TO SCALE

Source: 1976 Radius Plan and 1991 Final Closure Plan

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SITE SKETCH
TRUK-AWAY LANDFILL
WARWICK, RI

Figure 2

OPERATIONAL AND REGULATORY HISTORY AND WASTE CHARACTERISTICS

The earliest known use of the property was a sand and gravel operation [2,59]. W.J. Realty Co. of Providence, Rhode Island owned and leased the landfill property to Truk-Away of Rhode Island, Inc. (previously Sanitas Disposal Co.) from 1969 to 1976-1977 when it was sold to Truk-Away of Rhode Island, Inc. (owned by Charles Wilson) [2,53]. Rhode Island Department of Transportation (RIDOT) Division of Airports took ownership of the property on October 25, 1977 [3].

The property began accepting municipal and industrial wastes in 1970 under the name Warwick Sanitary Landfill, operated by Sanitas Waste Disposal of Rhode Island, a private commercial refuse collection company [56]. By 1976, the company had changed its name to Truk-Away of Rhode Island, Inc., and the landfill became known as the Truk-Away Landfill [25,62]. Along with its landfill operation, Truk-Away of Rhode Island, Inc. was (is) a major hauler of commercial and industrial trash in Warwick (14).

During a State inspection on June 4, 1982, a former landfill employee told the Rhode Island Department of Health (RIDOH) he had been responsible for overseeing the disposal of drummed chemical wastes at the Truk-Away Landfill in the 1970s and that "hundreds of drums" had been disposed of at the landfill [15]. According to the former employee, the types of wastes disposed of at the landfill included: sulfur monochloride, benzyl chloride, xylol, toluene, pyridine, spent solvents, nitrobenzene, chlorobenzene, trichloroethylene (TCE), dyes, pigments, intermediate compounds made from benzene reactions, phenols, hydrogen peroxide, and benzene sulfonyl chloride [15].

The only known potential source of contamination on the property is the 36-acre landfill itself. There are no containment factors associated with this source as it is unlined, and its waste is uncovered [3,10]. More information regarding the quantity and specific types of waste disposed of at the landfill from 1970 to 1977 are unknown [2,21,31,56].

According to a Notification of Hazardous Waste Site form completed by Recycling Industries Inc. of Braintree, Massachusetts, approximately 432 cubic feet and 39,050 gallons of "low hazard material (i.e., paint waste, still bottoms, hydroxide sludge, non-hazardous wastes)" were disposed of at the Truk-Away Landfill from 1977 to 1978 (although the landfill had reportedly ceased operating in 1977). The source of the wastes were identified as paper/printing, chemical, plating/polishing, utility, and metal fabrication companies [4].

The facility began its operations in the elevated northwest section of the property in May 1970. Prior to February 19, 1971, the facility began dumping into the "swampy area" without first placing any clean material as required by the RIDOH, Division of Solid Waste Management. Samples collected from Buckeye Brook on February 19, 1971 by RIDOH reportedly revealed characteristics similar to samples collected at other landfills having water pollution problems [25].

An old oil disposal pit located off the eastern boundary of the property was identified as a possible source of unidentified water quality contamination in a letter from the state to Sanitary Waste Disposal of Rhode Island dated July 22, 1974 [39]. The exact location of this pit was not determined; however, during the 1993 CDM reconnaissance (recon), an oily area was observed near the former building location near the western boundary of the landfill (see Figure 2: Site Sketch) [2].

During its operation, the landfill was the subject of several complaints. In 1974 and 1975, the RIDOH was informed of a roach problem at the landfill, and the Warwick Department of Public Works sprayed the landfill with chlordane [27]. In April 1976, the RIDOH received several odor complaints regarding the Truk-Away Landfill. Inspections conducted by the department indicated that the odors were emanating from an area of the landfill approximately 75 feet by 45 feet in size and that the odors were associated with decaying organic matter. Truk-Away of Rhode Island, Inc. was halted from further filling of the area by the Rhode Island Department of Natural Resources [6,26]. In October 1976, the Town of Warwick's Councilman informed the State Division of Water Pollution Control that he had received several odor complaints from the landfill. A follow-up inspection noted odors emanating from restaurant refuse on the central area of the landfill (12).

In January 1976, Truk-Away of Rhode Island, Inc. applied for permission to alter freshwater wetlands by filling a portion of an unnamed swamp in order to extend its existing landfill operation approximately 460 feet southward. Permission was denied because of the landfill's proximity to freshwater wetlands and the potential impact on the Buckeye Brook, Warwick Pond, and Narragansett Bay wetlands [22]. On February 25, 1976, the Warwick City Council requested that RIDOH inspect the landfill twice per week to ensure compliance with regulations due to numerous public complaints regarding the site [62].

In 1977, State inspections and field investigations observed several daily cover and wind-blown refuse control violations at the Truk-Away Landfill, and a hearing was held in April 1977 before the Adjudication Hearing Officer [41]. The results of the hearing were not determined during file reviews.

RIDOT reportedly condemned and closed the landfill in 1977 because birds circling the site interfered with air traffic at the nearby airport [14]. In October 1977, RIDOT took ownership of the property [3]. At that time, RIDEM informed DOT of the closure requirements associated with sanitary landfills and suggested that the responsibility for closure be left with Truk-Away of Rhode Island, Inc. prior to the transfer of property ownership [38]. According to the previous owner and operator of the landfill, Charles Wilson, the landfill was not clean closed; only exposed waste was covered with 2 to 3 feet of fill [2]. In 1980, RIDEM informed RIDOT of its responsibility to adequately close the facility [38].

In October and December 1980 and February 1981, Rhode Island Division of Water Resources collected surface water samples at three surface water locations associated with the site: Brush Neck Cove, Little Pond, and Buckeye Brook at Warwick Avenue. Brush Neck Cove is located

approximately 0.9 mile southeast; Little Pond is located approximately 0.75 mile southeast of the landfill. Samples were analyzed for metals and volatile organics [59,15] (see Figure 1: Location Map). Analytical results indicated the presence of TCE (at 1 microgram per liter (μg/L)) and mercury (at 0.0014 milligram per liter (mg/L)) [32]. (See Surface Water Pathway.)

The site was entered into the CERCLA Information System (CERCLIS) on June 1, 1981. On April 19, 1982, a perimeter survey was conducted by Ecology and Environment, Inc. (E&E) as part of a Superfund Preliminary Assessment of the site. Observations noted during the perimeter survey included noticeable odors and a leachate plume on the western boundary of the site and trash blown outside the western perimeter [10].

On July 23, 1982, as part of a Superfund Site Inspection, E&E collected headspace samples with an organic vapor analyzer (OVA) of leachate from the landfill. A gas chromatograph identified toluene in the leachate west #2 sample at 2 parts per million (ppm) and tetrachloroethylene (PCE) in the leachate S.E. sample at 2 ppm [23]. An HNu, used to monitor air during E&E's sampling, detected 50 to 150 ppm total volatile organics at the western and eastern edges of the landfill [23].

In August 1987, RIDEM collected two samples, one sediment sample and one surface water sample, at the base of an unnamed pond on the northern boundary of the site. Analytical results indicated polychlorinated biphenyls (PCBs) (at 3 ppm) in the surface water sample and chloroethane (at 17 parts per billion (ppb)), methylene chloride (at 5 ppb), and TCE (at 1 ppb) in the sediment sample [31].

In December 1988, RIDEM wrote the Division of Airports to clarify that it was the responsibility of the RIDOT to prepare a closure plan for the landfill, employ a registered professional engineer to prepare plans and specification of the existing and final grades for the landfill, maintain a total thickness of 24 inches of cover material on all surfaces and faces, and provide the landfill with a drainage system to minimize surface water runoff onto and into the fill, to prevent erosion of the fill, to drain off rainwater falling on the fill, and to prevent the collection of standing water [18].

In 1988, medical waste was discovered at the landfill by a nearby worker. RIDOT reportedly covered the exposed waste with 8 inches of cover [2,18]. According to a letter from RIDEM to the Division of Airports, the landfill was being used to illegally dispose of solid waste in December 1990. At that time, access was not restricted and the cover material on the landfill was insufficient [1].

On March 1, 1991, the RIDEM investigated the property due to noxious odors offending workers at the FAA Control Tower. A "foul smelling odor" detected in the swampy area behind the tower was followed back to Buckeye Brook. The observed leachate from the landfill into Buckeye Brook was believed to be causing eutrophication in the brook. "A reddish bacteria was observed coming from a shiny blanket on the bottom of the brook. Gas bubbles were seen being released from the stream" [16].

RIDEM Division of Groundwater and Freshwater Wetlands identified that freshwater wetlands are present on or adjacent to the landfill and conditionally approved an "insignificant" alteration of the freshwater wetland as proposed in the Final Closure Plan dated March 1, 1991 [52].

The Division of Airports filed a Wetlands Determination Application with the RIDEM Division of Water Resources and submitted a closure plan to the RIDEM Air and Hazardous Materials Division on April 16, 1991 [62]. As part of its closure plan, RIDOT proposed the following material as cover for the landfill: asbestos-contaminated building demolition debris from the Providence Housing Authority, unclassified excavation from a runway rehabilitation project onsite gravel bank, previously petroleum-contaminated soil processed in Warwick until clean, West Warwick Sewage Treatment Plant composted sludge and odorless organic material, and dewatered Narragansett Bay dredged material [3]. On May 1, 1991, RIDEM conditionally approved the plan and asked for a schedule of closure activities within ten days [17]. In May 1991, the City of Warwick hired its own consultant (Environmental Resource Associates Engineering, Inc.) to review the wetlands application and closure application [3,19]. On May 8, 1991, the City of Warwick petitioned for Declaratory Rulings and requested a Contested Hearing regarding the landfill [3].

In a letter dated May 21, 1991, the Division of Airports postponed submittal of a closure schedule due to lack of the requested wetlands determination and the City of Warwick's objections to the closure plan [41]. On June 7, 1991, the City of Warwick appealed the ruling of the RIDEM Division of Groundwater and Freshwater Wetlands dated May 31, 1991 based on incompleteness and nonconformance with applicable law and regulation requirements [28].

On February 3, 1993, RIDEM sent a letter to the Division of Airports requiring the submittal of a schedule within ten days indicating the beginning and ending dates for closure of the landfill. According to the letter, RIDEM had not received any correspondence from the Division of Airports indicating the beginning and ending of all closure activities [19]. As of April 1993, RIDEM had received no correspondence from the Division of Airports regarding the landfill's closure. RIDEM sent another letter to RIDOT requiring a schedule of closure activities by April 30, 1993 [9].

As part of the Superfund SIP, CDM conducted an onsite recon of the landfill on March 10, 1993 [2].

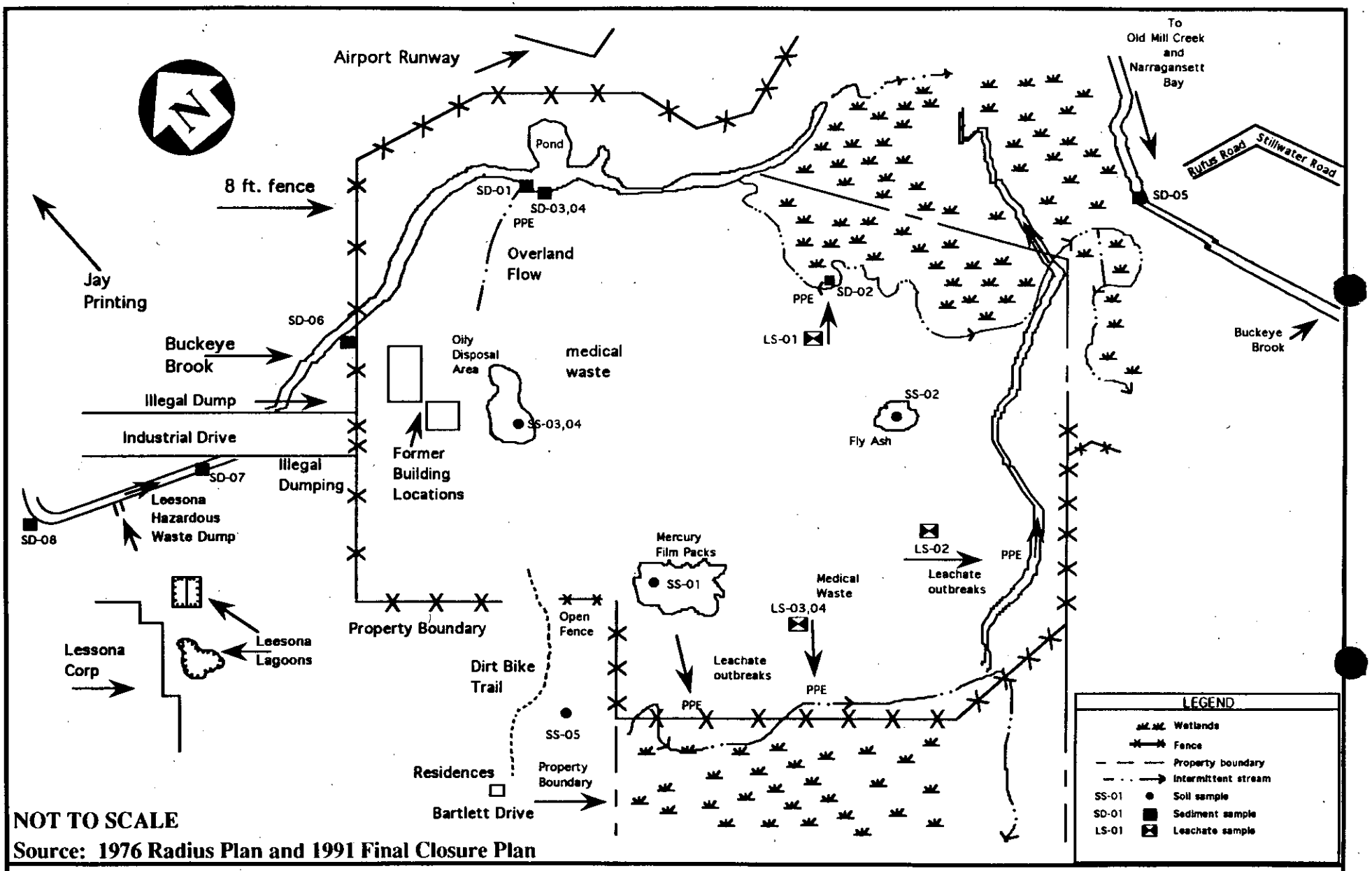
WASTE/SOURCE SAMPLING

On May 11, 1993, CDM collected four soil samples and four leachate (soil) samples from potential source areas on the landfill including an oily area, an area containing mercury film packs, an area reportedly used for fly ash disposal, and leachate outbreaks identified by stained soil. (See Figure 3: Sampling Locations.) Reference samples were taken off the landfill from areas presumed not to have been affected by landfill activities. Figure 3 illustrates the approximate location of samples collected by CDM on May 11, 1993. Table 1 presents a summary of potential source samples collected by CDM on May 11, 1993. All samples were submitted for full organic, total metals and cyanide analysis through the EPA Contract Laboratory Program (CLP).

Table 2 and Table 3 are a summary of compounds and analytes detected through the CLP analysis of CDM soil and sediment samples. For each sample location, a compound or analyte is listed if it is detected at three times or greater than the reference sample concentration. Compounds or analytes which occur at a concentration three times or greater than the reference concentration (sample location SS-05) are designated by their approximate relative concentration above the reference value. If the analyte or compound is not detected in the reference sample, the sample quantitation limit (SQL) (for organic analyses) or sample detection limit (SDL) (for inorganic analyses) is used as a reference value. Accordingly, compounds or analyte are listed by their approximate concentration above the SQL or SDL only if they occur at a value equal to or greater than the reference sample's SQL or SDL.

The complete analytical results of the CDM sampling activities, including quantitation and detection limits are presented in Attachment A. Sample results qualified with a "J" on the analytical tables are considered approximate because of limitations identified during the CLP data validation. In addition, organic sample results reported at concentrations below quantitation limits, and confirmed by mass spectrometry, are also qualified by a "J" and considered approximate. All samples met data quality objectives as stated in the Task Work Plan dated April 1993.

Analytical results indicated the presence of several contaminants at levels exceeding three times the reference sample, including volatile organics, semivolatile organics, pesticides, PCBs, and several metals. A composite sample collected in the mercury film pack area (SS-01) indicated the presence of pyrene (520 ppb), PCB aroclor-1254 (at 660 ppb), benzo(b)fluoranthene (at 520 ppb), chromium (at 35 ppm), copper (at 34.2 ppm), mercury (at 22.6J ppm), nickel (at 91.3 ppm), and zinc (at 92.6 ppm). A sample collected from a suspected fly ash disposal area indicated the presence of toluene (at 880J ppb), bis(2-ethylhexyl) phthalate (at 7,200J ppb), barium (at 51.7 ppm), lead (at 122 ppm), and zinc (at 84.5 ppm). A sample collected from an oil stained area indicated the presence of benzo(b)fluoranthene (at 1,400J ppb), fluoranthene (at 520J ppb), pyrene (at 640 ppb), indeno(1,2,3-cd)pyrene (at 490J ppb), benzo(g,h,i)perylene (at 400 ppb), 4,4″-DDE (at 7.9J ppb), and PCB aroclor-1254 (at 110 ppb). Samples collected from three areas of leachate-stained soil indicated the presence of bis(2-ethylhexyl)phthalate (6,500J), di-n-octyl phthalate (at 1,600 ppb), toluene (at 19 ppb), PCB aroclor-1248 (at 36J ppb), 1,1-



NOT TO SCALE

Source: 1976 Radius Plan and 1991 Final Closure Plan

CDM SAMPLING LOCATIONS
TRUK-AWAY LANDFILL
WARWICK, RI

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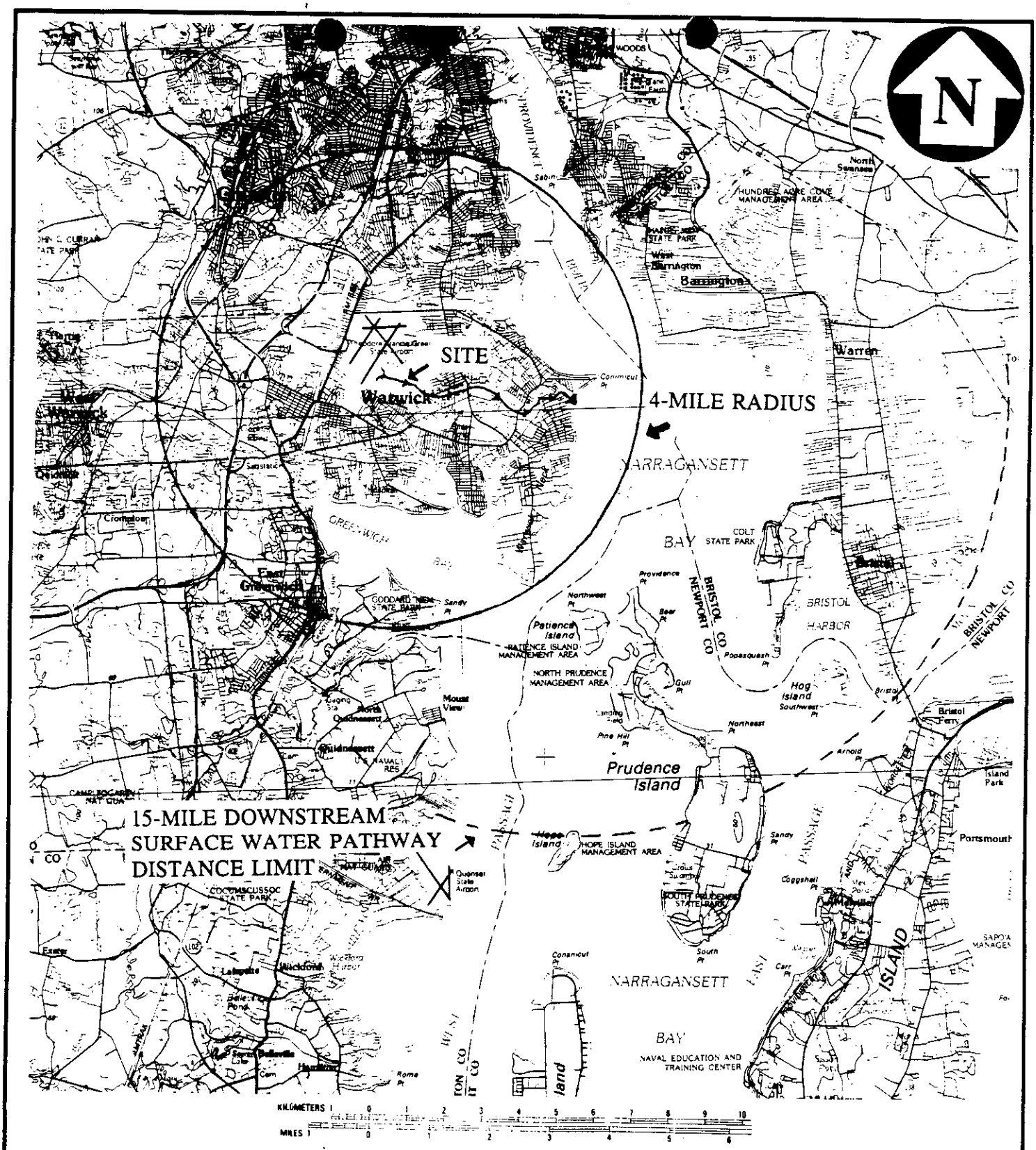
Figure 3



Source: U.S.G.S. 1984. Providence Quadrangle, R.I., MA, and CT. 30' x 60' series (topographic).

4 - MILE RADIUS
TRUK-AWAY LANDFILL
WARWICK, RHODE ISLAND

CDM FEDERAL PROGRAMS CORPORATION
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Figure 4

dichloroethane (at 52J ppb), 1,2-dichloroethene (total) (at 25J ppb), barium (as high as 104 ppm), calcium (as high as 3,050 ppm), copper (as high as 30.5 ppm), iron (as high as 97,500J ppm), lead (as high as 51.7 ppm), nickel (as high as 61.9 ppm), silver (at 5.5 ppm), and zinc (as high as 394 ppm) [54].

TABLE 1

Sample Summary: Truk-Away Landfill
Source Samples Collected by CDM on May 11, 1993

Sample Location No.	Traffic Report #	Time (hrs)	Remarks	Sample Source
SS-01	AEC37(O) MABG71(I)	1715	Composite	Surface soil from area of mercury film packs on the southern end of the landfill.
SS-02	AEC31(O) MABG70(I)	1900	Grab	Surface soil from fly ash on northeast portion of the landfill.
SS-03	ADG78(O) MABG78(I)	1805	Grab	Surface soil from oily stained area near concrete building slabs.
SS-04	AEC36(O) MABG90(I)	1810	Grab	Duplicate of SS-03 for QC.
SS-05	AEC48(O) MABG97(I)	0840	Grab	Surface soil background sample; outside southern boundary, near trails.
LS-01	AEC33(O) MABG73(I)	1905	Grab	Soil/Sediment from leachate plume on eastern slope of landfill.
LS-02	AEC32(O) MABG72(I)	1830	Grab	Soil/Sediment from leachate plume on southeastern slope of landfill.
LS-03	AEC38(O) MABG98(I)	1758	Grab	Soil/sediment from leachate plume on southern slope of landfill.
LS-04	AEC35(O) MABG89(I)	1805	Grab	Duplicate of LS-03 for QC.

QC = quality control
O = organic
I = inorganic
[2]

TABLE 2

Summary of Organic Analytical Results
Source Sample Analysis for
Truk-Away Landfill

Sample Location No.	Compound/ Analyte	Concentration (µg/kg)	Reference Concentration (µg/kg)	Comments
SS-01 AEC37 MABG71	Pyrene	520	23J	22.7 x REF
	Aroclor-1254	660	36	18.3 x SQL
	Benzo(b)fluoranthene	520	29J	17.9 x REF
SS-02 AEC31 MABG70	Toluene	880J	8J	110 x REF
	Bis(2-ethylhexyl)phthalate	7200J	360	20 x SQL
SS-03 ADG78 MABG78	Benzo(b)fluoranthene	1400J	360	3.9 x SQL
	4,4'-DDE	7.9J	0.25J	31.6 x REF
	Aroclor-1254	110	37	3.1 x SQL
SS-04 AEC36 MABG90	Fluoranthene	520J	25J	20.8 x REF
	Pyrene	640	23J	27.8 x REF
	Benzo(b)flouranthene	1100J	29J	37.9 x REF
	Indeno(1,2,3-cd)pyrene	490J	360	1.4 x SQL
	Benzo(g,h,i)perylene	400J	360	1.1 x SQL
	4,4'-DDE	7.7J	0.25J	30.8 x REF
	Aroclor-1254	84J	36	2.3 x SQL
LS-01 AEC33 MABG90	Bis(2-ethylhexyl)phthalate	6500J	360	18.1 x SQL
	Di-n-octyl phthalate	1600	360	4.4 x SQL
LS-02 AEC32 MABG72	Toluene	19	8J	2.4 x REF
	Aroclor-1248	36J	36	1 x SQL
LS-04 AEC35	1,1-Dichloroethane	52J	11	4.7 x SQL
	1,2-Dichloroethene (total)	25J	11	2.3 x SQL

REF = Reference concentration.
J = Quantitation is approximate due to limitations identified during the quality control review.
µg/kg = Micrograms per kilogram (parts per billion).
[55]

TABLE 3

Summary of Inorganic Analytical Results
Source Sample Analysis for
Truk-Away Landfill

Sample Location No.	Compound/ Analyte	Concentration (mg/kg)	Reference Concentration (mg/kg)	Comments
SS-01 AEC37 MABG71	Chromium	35	6.7 UJ	5.2 x REF
	Copper	34.2	9.6	3.6 x REF
	Mercury	22.6J	0.06 UJ	376.7 x REF
	Nickel	91.3	8.4	10.9 x REF
	Zinc	92.6	25.7	3.6 x REF
SS-02 AEC31 MABG70	Barium	51.7	14.6	3.5 x REF
	Lead	122	10.3	11.8 x REF
	Zinc	84.5	25.7	3.3 x REF
LS-01 AEC33 MABG73	Barium	65.9	14.6	4.5 x REF
	Zinc	209	25.7	8.1 x REF
LS-02 AEC32 MABG72	Barium	104	14.6	7.1 x REF
	Calcium	176	575	3.1 x REF
	Iron	97,500 J	12,600 J	7.7 x REF
	Lead	51.7	10.3	5.0 x REF
	Nickel	61.9	8.4	7.4 x REF
	Silver	5.5	0.87	6.3 x SDL
	Zinc	336	25.7	13.7 x REF
LS-03 AEC38 MABG98	Barium	80.8	14.6	5.5 x REF
	Calcium	2640	575	4.6 x REF
	Lead	31.9	10.3	3.1 x REF
	Nickel	26.6	8.4	3.2 x REF
	Zinc	306	25.7	11.9 x REF
LS-04 AEC35 MABG89	Arsenic	15.1	5.0	3.0 x REF
	Barium	97.2	14.6	6.7 x REF
	Calcium	3050	575	5.3 x REF
	Copper	30.5	9.6	3.2 x REF
	Iron	59,000 J	12,600 J	4.7 x REF
	Nickel	34.7	8.4	4.1 x REF
	Zinc	394	25.7	15 x REF

REF = Reference concentration.
J = Quantitation is approximate due to limitations identified during the quality control review.
UJ = The reported quantitation limits are qualified estimated.
mg/kg = Milligrams per kilogram (parts per million).
[54]

GROUNDWATER PATHWAY

Truk-Away Landfill is located in the Seaboard Lowland section of the New England physiographic province. Geologic units north of Greenwich Bay consist of unconsolidated outwash deposits. The outwash body underlies an area of about 20 square miles that extends from Greenwich Bay on the south into the Providence quadrangle on the north and from the Providence River on the east to the upland on the west. The ice-contact deposits in the area are highly variable in lithologic character and consist of materials ranging from pebble, cobble, and boulder gravel to sand and minor amounts of silt. The groundwater north of Greenwich Bay is largely unconfined, and many of the ponds and streams are possibly surface outcrops of the water table. The groundwater moves generally west toward the Pawtucket and Providence Rivers or toward Greenwich Bay. Some water moves toward and discharges into the smaller brooks [35]. (See Figure 4: 4-Mile Radius.)

Surficial geology in the area is made up of outwash, medium to coarse grained sand and gravel interbedded with fine sand, silt, and clay; unconsolidated; generally well sorted and stratified. Bedrock at the landfill is made up of consolidated igneous, metamorphic and sedimentary rocks and is set approximately 70 feet below the surface [56]. Depth of groundwater ranges from 3 to 17 feet according to observations made in 1976 at seven test pits located at the landfill [36]. Drainage is in an easterly direction toward Buckeye Brook [56].

Groundwater beneath the landfill is classified by RIDEM as GB: groundwater sources which may not be suitable for public or private drinking water without treatment due to known or presumed degradation. The landfill is located approximately 1.25 miles west of groundwater classified as GA: groundwater sources which may be suitable for public or private drinking water sources [34,47]. There are no community drinking water wells and no wellhead protection areas located within 4 miles of the landfill. The Warwick Water Department supplies 26,000 active services (households) in Warwick with drinking water from the Scituate Reservoir. Kent County Water Authority supplies 24,000 service connections in Warwick with drinking water from the Scituate Reservoir and from groundwater. Kent County's drinking water supply wells are located in Coventry and East Greenwich [45,48,49]. There are no public groundwater supply sources within 4 miles of the Truk-Away Landfill. The nearest public drinking water well is located approximately 6 miles south of the property on the border of East Greenwich and North Kingston at the Hope River [45].

There are no records of private drinking water wells for the Warwick area. The Warwick Water Department indicated possible locations where groundwater may be used for drinking water. These areas include one residence on Payton Avenue (located approximately 2.25 miles east of the landfill), a private compound including five potential drinking water wells on Budlong Road (located approximately 2.3 miles northwest of the property), and five residences or businesses located on Bald Hill Road (located approximately 3.5 miles west of the property) [36]. The average number of persons per household in Warwick is 2.52 [51]. No groundwater samples were collected by CDM as part of this SIP.

TABLE 4

Estimated Drinking Water Populations Served by Groundwater Sources Within 4 Miles of Truk-Away

Radial Distance From Truk-Away Landfill (miles)	Estimated Population Served by Private Wells	Estimated Population Served by Municipal Wells	Total Estimated Population Served by Groundwater Sources within the Ring
0.00 - 0.25	0	0	0
>0.25 - 0.50	0	0	0
>0.50 - 1.00	0	0	0
>1.00 - 2.00	0	0	0
>2.00 - 3.00	15	0	15
>3.00 - 4.00	13	0	13
TOTAL	28	0	28

[49]

SURFACE WATER PATHWAY

Drainage from the northwest section of the landfill flows overland north to a ponded section of Buckeye Brook which traverses the northern border of the property. In addition, groundwater appears to seep into this unnamed pond near the overland flow probable point of entry to the brook [2]. Wetlands surround the landfill to the north, east, and south and appear to drain toward Buckeye Brook. Several areas of the landfill itself are ponded and support wetland type plants, such as cattails and phragmites. Dark red and orange-stained soils, evidence of several leachate outbreaks, lead from the landfill's edges into the surrounding wetlands [2].

The 15-mile downstream surface water pathway includes Buckeye Brook, which travels east approximately 2.25 miles before its confluence with Old Mill Creek. Old Mill Creek then continues approximately 1 mile before entering Narragansett Bay. The remainder of the 15-mile pathway includes an 11.75-mile radial arc of Narragansett Bay [61,63].

The landfill is in a low lying area classified as a Mineral Swamp by the Rhode Island Department of Natural Resources [56]. On August 20, 1974, the Rhode Island Department of Natural Resources determined that an area immediately south of the landfill is a swamp of over 3 acres and is subject to the provisions of the Freshwater Wetlands Act [24]. On May 31, 1991, the RIDEM Division of Groundwater and Freshwater Wetlands determined that freshwater wetlands are present at the Truk-Away Landfill. An emergent community was identified adjacent to the roadway [52]. In addition, according to a 1973 National Wetlands Inventory Map, the following wetlands are located within the boundaries of the landfill: Palustrine, forested, broad-leaved deciduous; Palustrine emergent, and Palustrine open water. Palustrine scrub/shrub, broad-leaved deciduous and Palustrine, forested, broad-leaved deciduous wetlands are located along Buckeye Brook downstream of the probable point of entry [57].

In 1976, the Rhode Island Department of Natural Resources described the swamp located on the landfill as an important "refuge for what wildlife remains in the area. Elimination of this habitat will have a significant negative impact on local wildlife populations." The swamp is a part of Buckeye Brook and the Warwick Pond ecosystem which supports a major anadromous fish (alewife) run and forms an integral part of the Narragansett Bay ecosystem [22]. According to a 1974 letter from the RIDOH, herring make a spring run to Warwick Pond via Buckeye Brook [25]. Warwick Pond is located approximately 0.4 mile northeast of the probable point of entry [60].

Buckeye Brook is classified as a Class B waterway by RIDEM [56]. Class B includes the following water uses: public water supply with appropriate treatment, agricultural uses, bathing and other primary recreational activities, and fish and wildlife habitat [64]. The fresh/salt water boundary in Buckeye Brook is located at the West Shore Road bridge [33]. Old Mill Creek is a tidalwater and likely supports similar fish to the coastal waters of Narragansett Bay. Narragansett Bay supports flounder as well as shellfish [50]. Approximately 17,826,000 pounds of shellfish were caught in 1991 [33,44,50].

The State has designated two wildlife management areas in Narragansett Bay within the 15-mile downstream surface water pathway. Prudence Island Management Area is located 8.25 miles south of Old Mill Creek, and North Patience Island Management Area is located 7.75 miles south [60,61]. Both Prudence and North Patience Island Management Areas are considered critical habitats for species of special concern as well as Hog Island (located 6.25 miles from the mouth of Old Mill Creek) and Mill Gut (located just north of Colt State Park), approximately 3.8 miles from the mouth of Old Mill Creek [58,61].

TABLE 5

Water Bodies Within the Surface Water Segment of Truk-Away Landfill

Surface Water Body	Descriptor[a]	Length of Reach	Flow Characteristics (cfs)[b]	Length of Wetlands
Buckeye Brook	Minimal Stream	2.25 miles	< 10	0.75 mile
Old Mill Creek	Coastal Tidal Waters	1 mile	> 100	NA
Narragansett Bay	Deep Ocean Zone	11.75 miles	> 100	NA

[a] Minimal stream. Small to moderate stream. Moderate to large stream. Large stream to river. Very large river. Coastal tidal waters. Shallow ocean zone or Great Lake. Deep ocean zone or Great Lake. Three-mile mixing zone in quiet flowing river.
[b] Cubic feet per second.
[60,61]

In 1980, the RIDEM Division of Water Resources established a sampling program in the area of the Truk-Away Landfill which consisted of three stations located on Buckeye Brook at Warwick Avenue, Little Pond, and Brush Neck Cove at the western end of Canfield Avenue. Samples were collected three times during a five month period (October and December 1980 and February 1981) and were analyzed for heavy metals, trihalomethanes, aromatic solvents, halogenated volatiles, and total and fecal coliform. Results as of April 1981 indicated no concentrations above EPA Water Quality Criteria for drinking water. TCE was the only organic compound detected at 1 μg/L. Mercury was detected at 0.0014 mg/L, slightly above the recommended criteria for freshwater aquatic life. According to RIDEM's report, the bacteriological sample results indicated levels compatible with an urbanized drainage area [32].

On May 11, 1993, CDM collected seven sediment samples. Three samples were collected upstream of the property from areas presumed to be undisturbed by the landfill's operations. SD-06, collected immediately upstream of the landfill was used as the reference sample for Table 7 and Table 8. Figure 3 illustrates the approximate location of samples collected by CDM. Table 6 presents a summary of the surface water pathway samples collected by CDM. All samples were submitted for full organic, total metals, and cyanide analysis through CLP.

CDM was not able to collect a sample from Buckeye Brook downstream of the landfill due to lack of remaining daylight. This sample location, SD-05, is located off Rufus Road in Warwick, east of the landfill [2].

Table 7 and Table 8 are a summary of compounds and analyte detected through the CLP analysis of CDM sediment samples. For each sample location, a compound or element is listed if it is detected at three times or greater than the reference sample concentration. Compounds or elements which occur at a concentration three times or greater than the reference concentration (sample location SD-06) are designated by their approximate relative concentration above the reference value. If the element or compound is not detected in the reference sample, the SQL (for organic analyses) or SDL (for inorganic analyses) is used as a reference value. Accordingly, compounds or analytes are listed by their approximately concentration above the SQL or SDL only if they occur at a value equal to or greater than the reference sample's SQL or SDL.

The complete analytical results of the CDM sampling activities, including quantitation and detection limits are presented in Attachment A. Sample results qualified with a "J" on the analytical tables are considered approximate because of limitations identified during the CLP data validation. In addition, organic sample results reported at concentrations below quantitation limit and confirmed by mass spectrometry, are also qualified by a "J" and considered approximate.

TABLE 6
Sample Summary: Truk-Away Landfill
Surface Water Pathway Samples Collected by CDM on May 11, 1993

Sample Location No.	Traffic Report #	Time (hrs)	Remarks	Sample Source
SD-01	AEC28(O) MABG74(I)	2010	Grab	Sediment from pond at overland flow probable point of entry (PPE).
SD-02	AEC39(O) MABG79(I)	1915	Grab	Sediment from wetland downslope of leachate plume.
SD-03	AEC34(O) MABG88(I)	2000	Grab	Sediment at pond (previous area of PCB contamination).
SD-04	AEC29(O) MABG75(I)	2005	Grab	Duplicate of SD-03; for QC.
SD-05	--	-	Not collected	Sediment from Buckeye Brook near Rufus Road, not collected due to lack of daylight.
SD-06	AEC43(O) MABG94(I)	1020	Grab	Sediment background sample, upgradient of SD-03, just outside the landfill's boundaries.
SD-07	AEC44(O) MABG95(I)	1048	Grab	Sediment background sample, upgradient of illegal dumping area and upgradient of SD-06.
SD-08	AEC45(O) MABG96(I)	1132	Grab	Sediment background sample, upgradient of Leesona Corp. and upgradient of SD-07.

QC = quality control
O = organic
I = inorganic
[2]

TABLE 7

Summary of Organic Analytical Results
Sediment Sample Analysis for
Truk-Away Landfill

Sample Location No.	Compound/ Analyte	Concentration (µg/kg)	Reference Concentration (µg/kg)	Comments
SD-01	Phenanthrene	2900	460	6.3 x SQL
AEC28	Anthracene	790	460	1.7 x SQL
MABG74	Carbazole	480	460	1.0 x SQL
	Fluoranthene	4700	460	10.2 x SQL
	Pyrene	6400	460	13.9 x SQL
	Benzo(a)anthracene	2800	460	6.1 x SQL
	Chrysene	2600	460	5.7 x SQL
	Bis(2-ethylhexyl)phthalate	9900	460	21.5 x SQL
	Benzo(k)fluoranthene	4700	460	10.2 x SQL
	Benzo(a)pyrene	2800J	460	6.1 x SQL
	Indeno(1,2,3-cd)pyrene	2000J	460	4.3 x SQL
	Benzo(g,h,i)perylene	1900J	460	4.1 x SQL
	Aroclor 1260	84J	46	1.8 x SQL
SD-02	Fluoranthene	930J	460	2.0 x SQL
AEC39	Pyrene	950J	460	2.1 x SQL
MABG79	Benzo(a)anthracene	600	460	1.3 x SQL
	Benzo(b)fluoranthene	940J	460	2.0 x SQL
SD-03	Chloroethane	92	14	6.6 x SQL
AEC34	2-Butanone	15J	14	1.1 x SQL
MABG88	Chlorobenzene	32J	14	2.3 x SQL
	Acenapthene	570J	460	1.2 x SQL
	Fluorene	630J	460	1.4 x SQL
	Phenanthrene	4800	460	10.4 x SQL
	Anthracene	850	460	1.8 x SQL
	Fluoranthene	8000	460	17.4 x SQL
	Pyrene	10,000J	460	21.7 x SQL
	Benzo(a)anthracene	4700J	460	10.2 x SQL
	Chrysene	3800J	460	8.3 x SQL
	Bis(2-Ethylhexyl)phthalate	4100J	44J	93.2 x REF
	Benzo(b)fluoranthene	6300J	460	13.7 x SQL
	Benzo(a)pyrene	3100J	460	6.7 x SQL
	Indeno(1,2,3-cd)pyrene	2800J	460	6.1 x SQL
	Benzo(g,h,i)perylene	2200J	460	4.8 x SQL
	4,4'-DDE	5.8	4.6	1.3 x SQL

TABLE 7
(Continued)

Sample Location No.	Compound/ Analyte	Concentration (µg/kg)	Reference Concentration (µg/kg)	Comments
SD-03, cont.	Aroclor 1260	140J	46	3 x SQL
SD-04 AEC29 MABG75	Chloroethane	95	14	6.8 x SQL
	Chlorobenzene	55J	14	3.9 x SQL
	Styrene	24J	14	1.7 x SQL
	Phenanthrene	4100	460	8.9 x SQL
	Anthracene	880	460	1.9 x SQL
	Fluoranthene	9000	460	19.6 x SQL
	Pyrene	7900	460	17.2 x SQL
	Benzo(a)anthracene	4700	460	10.2 x SQL
	Chrysene	3700	460	8 x SQL
	Bis(2-ethylhexyl)phthalate	4700	44J	106.8 x REF
	Benzo(b)fluoranthene	6700	460	14.6 x SQL
	Benzo(a)pyrene	3400	460	7.4 x SQL
	Indeno(1,2,3-cd)pyrene	2400	460	5.2 x SQL
	Benzo(g,h,i)perylene	2000	460	4.3 x SQL
	4,4'- DDE	5.4J	4.6	1.2 x SQL

REF = Reference concentration.
J = Quantitation is approximate due to limitations identified during the quality control review.
µg/kg = Micrograms per kilogram (parts per billion).
[55]

TABLE 8

Summary of Inorganic Analytical Results
Sediment Sample Analysis for
Truk-Away Landfill

Sample Location No.	Compound/ Analyte	Concentration (mg/kg)	Reference Concentration (mg/kg)	Comments
SD-01 AEC28 MABG74	Lead	41.6	5	8.3 x REF
SD-02 AEC39 MABG99	Barium	116	20.9	5.6 x REF
	Calcium	3,270	940	3.5 x REF
	Iron	67,800 J	5,140 J	13.2 x REF
	Lead	25.7	5	5.1 x REF
	Zinc	148	45.1	3.3 x REF
SD-03 AEC34 MABG88	Arsenic	10.3	1.7	6.1 x REF
	Copper	55.7	7.8	7.1 x REF
	Iron	20,900 J	5,140 J	4.1 x REF
	Lead	106	5	21.2 x REF
	Mercury	0.27J	0.06 J	4.5 x REF
	Potassium	1,150 J	275 UJ	4.2 x REF
	Sodium	132	39.3 U	3.4 x REF
	Zinc	189	45.1	4.2 x REF
SD-04 AEC29 MABG75	Arsenic	8.7	1.7	5.1 x REF
	Copper	35.6	7.8	4.6 x REF
	Iron	16,100 J	5,140 J	3.1 x REF
	Lead	75.6	5	15.1 x REF
	Mercury	0.31 J	0.06 J	5.2 x REF
	Potassium	1,090 J	275 UJ	4.0 x REF
	Zinc	142	45.1	3.1 x REF

REF = Reference concentration.
J = Quantitation is approximate due to limitations identified during the quality control review.
mg/kg = Milligrams per kilogram (parts per million).
[54]

SOIL EXPOSURE PATHWAY

Entrance to the landfill is barred by a Jersey barrier; the landfill's perimeter is surrounded by an 8-foot chain-link fence topped with barbed wire. During the recon, CDM observed an approximately 25-foot section of fence that had been cut leaving a wide open space where worn paths indicated recreational dirt biking onsite. Well worn dirt trails lead an estimated 0.1 mile from the end of Bartlett Drive to the fence opening. The only workers within 200 feet of potential contamination are those working in the office park located at the former Leesona Corporation. Distance from the office park building to the landfill's western boundary is estimated at 100 feet [29,60]. The nearest offsite residence is located approximately 500 feet south of the landfill [13,29,59]. There are an estimated 701 people living within 1 mile of the landfill [13]. There are no schools or day-care centers within 200 feet of the landfill [2]. There are no terrestrial sensitive environments on the landfill [21].

During the recon, CDM observed exposed waste on the landfill including: medical waste, mercury film packs, paint cans, fly ash, household trash, and electrical waste [2]. CDM collected surface soil samples from the landfill and sediment samples from the unnamed pond and wetlands. Analytical results are in the Waste/Source Sampling section of this report and are summarized in Tables 2 and 3.

In eight surface soil samples collected from within 6 inches of the ground surface and in areas of prior waste disposal and leachate outbreaks, the maximum VOC contaminant detected was toluene at 880J ppb. The highest concentration of a semivolatile compound was bis(2-ethylhexyl)phthalate at 7,200J ppb. 4,4'-DDE, at 7.9J ppb, was the only pesticide detected onsite. PCB aroclor-1254 was detected at 110 ppb, the highest concentration of PCBs detected onsite. Of the inorganics, copper was detected at a maximum of 34.2 ppm, lead at a maximum of 122 ppm, mercury at a maximum of 22.6J ppm, nickel at a maximum of 91.3 ppm, silver at 5.5 ppm, zinc at 394 ppm, barium at a maximum of 104 ppm, and iron at a maximum of 97,500J ppm. Although many of these contaminants were detected in the reference sample taken off the landfill property the, above-mentioned contaminants were detected from 3 to 376 times greater than the reference concentrations (see Tables 2 and 3 and Figure 3) [54,55].

A larger number of volatile and semivolatile organics were detected in four sediment samples collected on the landfill property within 6 inches of the ground surface. The highest concentration of VOCs detected was chloroethane at 95 ppb. The highest concentration of semivolatile organic compounds was pyrene detected at 10,000J ppb. PCB aroclor-1260 was detected at a maximum of 140J ppb, and 4,4'-DDE was detected at 5.8 ppb. In the sediment samples, barium was detected at 116 ppm, calcium at 3,270 ppm, copper at 55.7 ppm, iron at 67,800J ppm, lead at 106 ppm, mercury at 0.31J ppm, potassium at 1,150J ppm, and zinc at 189 ppm. Bis(2-ethylhexyl)phthalate was the only organic contaminant detected in the reference sediment sample collected upstream of the landfill property. Although several inorganics were detected in the reference sample, the above-mentioned inorganic contaminants were detected in downstream sediment samples at concentrations from 3 to 21.2 times greater than the reference samples [54,55].

AIR PATHWAY

The nearest individuals to onsite source areas are workers in the office park located at the former Leesona Corporation. Distance from the building to the landfill's western boundary is estimated at 100 feet [29,59]. The nearest residents are located south of the property, approximately 500 feet from the landfill [13,29,59]. There are an estimated 701 people living within 1 mile of the landfill and an estimated 29,704 people living within 4 miles of the property by radial distance ring [13]. Worker population within 4 miles of the property includes: 230 employees at Jay Printing facility (Industrial Drive) and employees working in the office park located at the former Leesona Corporation [3,48]. The nearest school is the Lippitt School located in Warwick, approximately 0.5 mile south of the landfill. Approximately 383 students are enrolled at this school [43]. There are 240 students enrolled at Buttonwoods School located approximately 1 mile south of the landfill [42]. (See Table 9: Estimated Population Within 4 Miles of Truk-Away Landfill. Note: this table includes residents as well as students and workers identified above.)

TABLE 9

Estimated Population Within 4 Miles of Truk-Away Landfill

Radial Distance from Truk-Away Landfill (miles)	Estimated Population
0.00 - 0.25	37
>0.25 - 0.50	689
>0.50 - 1.00	848
>1.00 - 2.00	3,189
>2.00 - 3.00	6,450
>3.00 - 4.00	18,734
TOTAL	29,947

[13,42,43]

In July 1982, E&E used an HNu to monitor organics in air during leachate sampling. The HNu detected 50 to 150 ppm in air at leachate seeps on the western and eastern edges of the landfill [23]. CDM used an organic vapor monitor (OVM) to monitor ambient air during the March 1993 recon and May 1993 sampling event. No concentrations above background were detected [2].

The nearest sensitive environment to the landfill are the wetlands located along the northern, eastern, and southern boundaries of the property. Based on a 1976 plan of the property, at least 16 acres of wetlands surround the landfill [29].

SUMMARY AND CONCLUSIONS

The Truk-Away Landfill is located on Industrial Drive in Warwick, Rhode Island. The landfill accepted municipal and industrial wastes during its operations from 1970 to 1977. According to a landfill employee, hundreds of drums containing sulfur monochloride, benzyl chloride, xylol, toluene, pyridine, spent solvents, nitrobenzene, chlorobenzene, trichloroethylene, dyes, pigments, intermediate compounds made from benzene reactions, phenols, hydrogen peroxide, and benzene sulfonyl chloride were disposed of at this landfill.

During its operation, the landfill was the subject of several complaints, including roach and odor problems. In 1977, the landfill was sold to the Rhode Island Department of Transportation, Division of Airports and ceased operations due to the hazards posed to the nearby T.F. Green State Airport by sea gulls attracted to the landfill. The landfill has never been clean closed. Various types of waste are exposed throughout the landfill including medical waste, electrical waste, paint cans, mercury film packs, and fly ash. The landfill is accessible due to an opening in the fence. Dirt bike trails were noted during the 1993 CDM site reconnaissance.

There are no public or known private drinking water wells within a 4-mile radius of the landfill; although it is possible that there are groundwater wells serving private residences 2 to 3 miles from the landfill. Surface water from the landfill drains to Buckeye Brook. The probable point of entry (PPE) of surface water runoff to a perennially wet surface water body is at Buckeye Brook located on the northern boundary of the property. From the PPE, surface water flows east approximately 2.25 miles downstream before discharging to Old Mill Creek. Surface water continues to flow east approximately 1 mile before discharging into Narragansett Bay. Sensitive environments along the 15-mile downstream surface water pathway include Patience Island Management Area and North Prudence Island Management Area.

The nearest residence is located approximately 500 feet south of the landfill. There are no people living on or within 200 feet of an area of observed contamination. An estimated 701 people live within 1 mile of the landfill. Analytical results from surficial soil samples collected by CDM showed chromium, lead, mercury, polychlorinated biphenyls, toluene, and several semivolatile organic compounds to be present on the landfill.

The nearest individual to the landfill are workers at the office park located approximately 100 feet west of the landfill. There are an estimated 29,947 people who live, work, or attend school within 4 miles of the landfill. Sensitive environments within 4 miles of the landfill are wetlands associated with Buckeye Brook.

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CDM FEDERAL PROGRAMS CORPORATION
a subsidiary of Camp Dresser & McKee Inc.

December 10, 1993

Mr. Joseph Unsworth
Rhode Island Department of Environmental Management
Division of Air and Hazardous Materials
291 Promenade Street
Providence, RI 02908-5767

SUBJECT: EPA Contract No.: 68-W9-0045
Work Assignment No.: 23-1JZZ
Final Site Inspection Prioritization Report
Truk-Away Landfill
Warwick, Rhode Island
TDD No.: 9109-20-ACX
CERCLIS No.: RID987493822

DOCUMENT NO.: 7710-023-ST-BGML

Dear Mr. Unsworth:

One copy of the Final Site Inspection Prioritization Report for Truk-Away Landfill, in Warwick, Rhode Island is enclosed. An additional copy of the report is enclosed for your distribution to the City of Warwick. If you have any comments or questions regarding this submittal, please contact me at (617) 742-2659.

Very truly yours,

CDM FEDERAL PROGRAMS CORPORATION

Tara Abbott Taft
ARCS I Work Assignment Manager

Approved:

Myron S. Rosenberg, Ph.D., P.E.
ARCS I Program Manager

TAT/bg

Attachment
cc: Sharon Hayes, EPA Work Assignment Manager and Rhode Island Site Assessment Manager (letter only)
Nadine Raniere, EPA Project Officer (letter only)
Contract File

CDM FEDERAL PROGRAMS CORPORATION
a subsidiary of Camp Dresser & McKee Inc.

December 10, 1993

Ms. Sharon Hayes
Work Assignment Manager
U.S. Environmental Protection Agency
JFK Federal Building
(HSS-CAN7)
Boston, MA 02203

SUBJECT: EPA Contract No.: 68-W9-0045
Work Assignment No.: 23-1JZZ
Final Site Inspection Package
Truk-Away Landfill
Warwick, Rhode Island
TDD No.: 9109-20-ACX
CERCLIS No.: RID987493822

DOCUMENT NO.: 7710-023-FR-BGMM
7710-023-DD-BGMN

Dear Ms. Hayes:

Enclosed are two copies of the Final Site Inspection Prioritization Package for Truk-Away Landfill located in Warwick, Rhode Island. Draft report comments submitted by the U.S. Environmental Protection Agency (EPA) have been incorporated. As you directed, the CERCLIS No. for the Truk-Away Landfill was changed from RID054034293 to RID987493822 throughout the package. Draft report comments from the state were not received by the comment due date. Two copies of the final report have been sent to the state contact under separate cover.

This Final Site Inspection Prioritization Package was prepared in response to Technical Directive Document (TDD) No. 9109-20-ACX. An Acknowledgement of Completion will follow shortly documenting the completion of work under this TDD.

If you have any comments or questions regarding this submittal, please contact me at (617) 742-2659.

Very truly yours,

CDM FEDERAL PROGRAMS CORPORATION

Tara Abbott Taft
ARCS I Work Assignment Manager

Approved:

Myron S. Rosenberg, Ph.D., P.E.
ARCS I Program Manager

TAT/bg

Attachment

cc: Nadine Raniere, EPA Project Officer (letter only)
Contract File

CDM FEDERAL PROGRAMS CORPORATION
a subsidiary of Camp Dresser & McKee Inc.

December 29, 1993

Ms. Sharon Hayes
Work Assignment Manager
U.S. Environmental Protection Agency
JFK Federal Building
(HSS-CAN7)
Boston, MA 02203

SUBJECT: EPA Contract No.: 68-W9-0045
Work Assignment No.: 23-1JZZ
Site Inspection Prioritization Analytical Results
Truk-Away Landfill
Warwick, Rhode Island
TDD No.: 9109-20-ACX
CERCLIS No.: RID987493822

DOCUMENT NO.: 7710-023-EP-BHCH

Dear Ms. Hayes:

Please note a discrepancy between the Truk-Away Landfill Final Site Inspection Prioritization report and the analytical results included in Attachment A. The inorganic analytical results labeled as SD-05 were actually collected from location SS-05. The sample location numbers were inadvertently reversed during completion of the inorganic traffic report. Both the organic and inorganic CLP numbers were entered correctly. No sample was collected from sample location SD-05. The sample identification numbers were corrected in the report but were not corrected in the attachment.

If you have any comments or questions regarding this submittal, please contact me at (617) 742-2659.

Very truly yours,

CDM FEDERAL PROGRAMS CORPORATION

Tara Abbott Taft
ARCS I Work Assignment Manager

Approved:

Myron S. Rosenberg, Ph.D., P.E.
ARCS I Program Manager

TAT/bg

Attachment
cc: Tim O'Connor, RIDEM
Contract File

CDM FEDERAL PROGRAMS CORPORATION
a subsidiary of Camp Dresser & McKee Inc.

February 9, 1994

Mr. Donald Wignall
The Lares Group
333 Strawberry Field Road
Warwick, RI 02886

SUBJECT: EPA Contract No.: 68-W9-0045
Work Assignment No.: 23-1JZZ
Final Site Inspection Prioritization Report
Truk-Away Landfill
Warwick, Rhode Island

DOCUMENT NO.: 7710-023-IN-BHQV

Dear Mr. Wignall:

Enclosed is a copy of the Final Site Inspection Prioritization Report for Truk-Away Landfill located in Warwick, Rhode Island. The report includes analytical results for samples which were collected from this property.

If you have any questions, please contact the U.S. Environmental Protection Agency (EPA) Rhode Island Site Assessment Manager, Sharon Hayes, at (617) 573-5709.

Very truly yours,

CDM FEDERAL PROGRAMS CORPORATION

Tara Abbott Taft
ARCS I Work Assignment Manager

Approved:

Myron S. Rosenberg, Ph.D., P.E.
ARCS I Program Manager

TAT/jr

Attachment

cc: Sharon Hayes, EPA Work Assignment Manager and Site Assessment Manager (letter only)
ARCS Contract File (letter only)

CDM FEDERAL PROGRAMS CORPORATION
a subsidiary of Camp Dresser & McKee Inc.

February 9, 1994

Mr. Robert Partington
State of Rhode Island
Division of Airports
TF Green State Airport
Warwick, RI 02886

SUBJECT: EPA Contract No.: 68-W9-0045
Work Assignment No.: 23-1JZZ
Final Site Inspection Prioritization Report
Truk-Away Landfill
Warwick, Rhode Island

DOCUMENT NO.: 7710-023-IN-BHQW

Dear Mr. Partington:

Enclosed is a copy of the Final Site Inspection Prioritization Report for Truk-Away Landfill located in Warwick, Rhode Island. The report includes analytical results for samples which were collected from this property.

If you have any questions, please contact the U.S. Environmental Protection Agency (EPA) Rhode Island Site Assessment Manager, Sharon Hayes, at (617) 573-5709.

Very truly yours,

CDM FEDERAL PROGRAMS CORPORATION

Tara Abbott Taft
ARCS I Work Assignment Manager

Approved:

Myron S. Rosenberg, Ph.D., P.E.
ARCS I Program Manager

TAT/jr

Attachment

cc: Sharon Hayes, EPA Work Assignment Manager and Site Assessment Manager (letter only)
ARCS Contract File (letter only)

98 North Washington Street, Suite 200 Boston, MA 02114 617 742-2659

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
ONE CONGRESS STREET
BOSTON, MASSACHUSETTS 02203-2211

February 24, 1994

Mr. Robert Fitzpatrick
Hale and Dorr
60 State Street
Boston, MA 02210

Re: 01-RIN-00215-94

Dear Mr. Fitzpatrick:

In response to your Freedom of Information Request, enclosed please find the Site Inspection Prioritization Report for Truk-Away Landfill, Warwick, RI (RID987493822).

Because this request totals less than $25.00, there is no charge. If you have any further questions, please contact me at (617) 573-9645.

Sincerely,

Ann Marie Deacetis

Ann Marie Deacetis
Program Assistant
Superfund Support Section

Enclosures